

Draft Final Report -
November 5, 2018

CITY PLANNING

AF

Avent Ferry

Corridor Study

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Raleigh

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ACKNOWLEDGMENTS

Raleigh City Council

Mayor Nancy McFarlane
Russ Stephenson
Nicole Stewart
Richard A. “Dickie” Thompson
David N. Cox
Corey D. Branch
Kay Crowder
Stef Mendell

Raleigh Core Project Team

Matthew Klem
Dhanya P. Sandeep, AICP
Karli Stephenson, Associate ASLA
Allison Evans

Raleigh City Planning

Ken Bowers, AICP
Travis Crane
Roberta Fox AIA, ASLA
Carter Pettibone, AICP
Charles Dillard, AICP
Joe Michael, AIA
Beth Nooe, Associate AIA

Raleigh Communications

David Langley
Aaron Sheppard
Kristin Williams

Raleigh Transportation

Eric Lamb, PE
Jason Myers, AICP
Tara Hofferth
Paul Black
Trung Vo, PE, AICP
Brandon Watson

Parks, Recreation and Cultural Resources

Lisa Schiffbauer
TJ McCourt, AICP
Emma Liles
Shawsheen Baker, PLA, AICP, LEED AP

ColeJenest and Stone

Brian Jenest, RLA
Michael Cole, FASLA
Dave Toms, RLA, LEED AP ND
Scott Hazard, RLA
Beth Faragan

NC State University

Tom Skolnicky
Lauren Joyner
Mike Kennon

Community Groups

West CAC
Southwest CAC

Corridor Stakeholders

The Catholic Diocese of Raleigh
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EXECUTIVE SUMMARY

The following pages describe the major recommendations of the study that reinforce the primary goal of this study:

“to plan for and implement a safe, vibrant corridor for pedestrians, cyclists, transit-users and motorists that helps enhance livability and economic viability.”

Overall Goals for the Avent Ferry Corridor Study

- Enhance economic vitality and livability
- Promote ease-of-access and movement with complete streets design
- Leverage public infrastructure to better secure long-term corridor stability
- Identify market opportunities for redevelopment
- Retain and expand commercial services as a high priority
- Celebrate and highlight the area’s economic and ethnic diversity
- Develop a mix of residential types to attract and retain residents
- Create walkable, mixed-use development at key nodes
- Strengthen overall connectivity within and to surrounding areas
- Improve the safety and aesthetic appeal of the corridor
- Provide feasible implementation items



Introduction

Avent Ferry Road’s long transportation history began as a major Raleigh and Wake County connection to the Cape Fear River dating to the 1800’s. The street’s character has changed and its length significantly shortened since the Avent family operated a ferry at the river at present-day NC42 bridge. Avent Ferry has since become a primary residential corridor serving NC State University’s Main and Centennial Campuses and providing the key link between Western Boulevard and Tryon Road. The existing character of the Avent Ferry Corridor is noted as non-descript and characterized by aging strip malls and University-related residential structures common to cities throughout the country. Visually, there is little distinguishing this highly-traversed Corridor from many other arteries in the city. Many pedestrians and cyclists heavily use Avent Ferry despite few crosswalks, inconsistent sidewalk/multiuse path patterns, and numerous curb-cuts/driveways that create possibly dangerous conflict points. The street was designed to support lifestyles and transportation

systems long eclipsed by a fresh demand for mixed-use and vibrant, walkable communities.

Recognizing the importance of this corridor and its redevelopment potential into the future, the City of Raleigh’s Urban Design Center launched a planning study in late 2016. A Kick-off Meeting was held in March 2017 to review initial findings from the design team’s analysis of existing conditions and to discuss broad goals for the study. Several public venues and dates were made available to the community for participation through the course of the planning process. Public workshops were held on October 4 and 5, 2017, with a follow-up workshop on March 3, 2018, which provided the public generous opportunity to “weigh in” and to express specific and general opinions, concerns and ideas for developing plans and typical cross-sections. In addition to the workshops, the Urban Design Center hosted several “pop-up” meetings at locations near the Corridor to increase opportunities for residents and local businesses to provide input. For residents and

stakeholders unable to attend either of the in-person visioning sessions, an online survey was made available in April 2018.

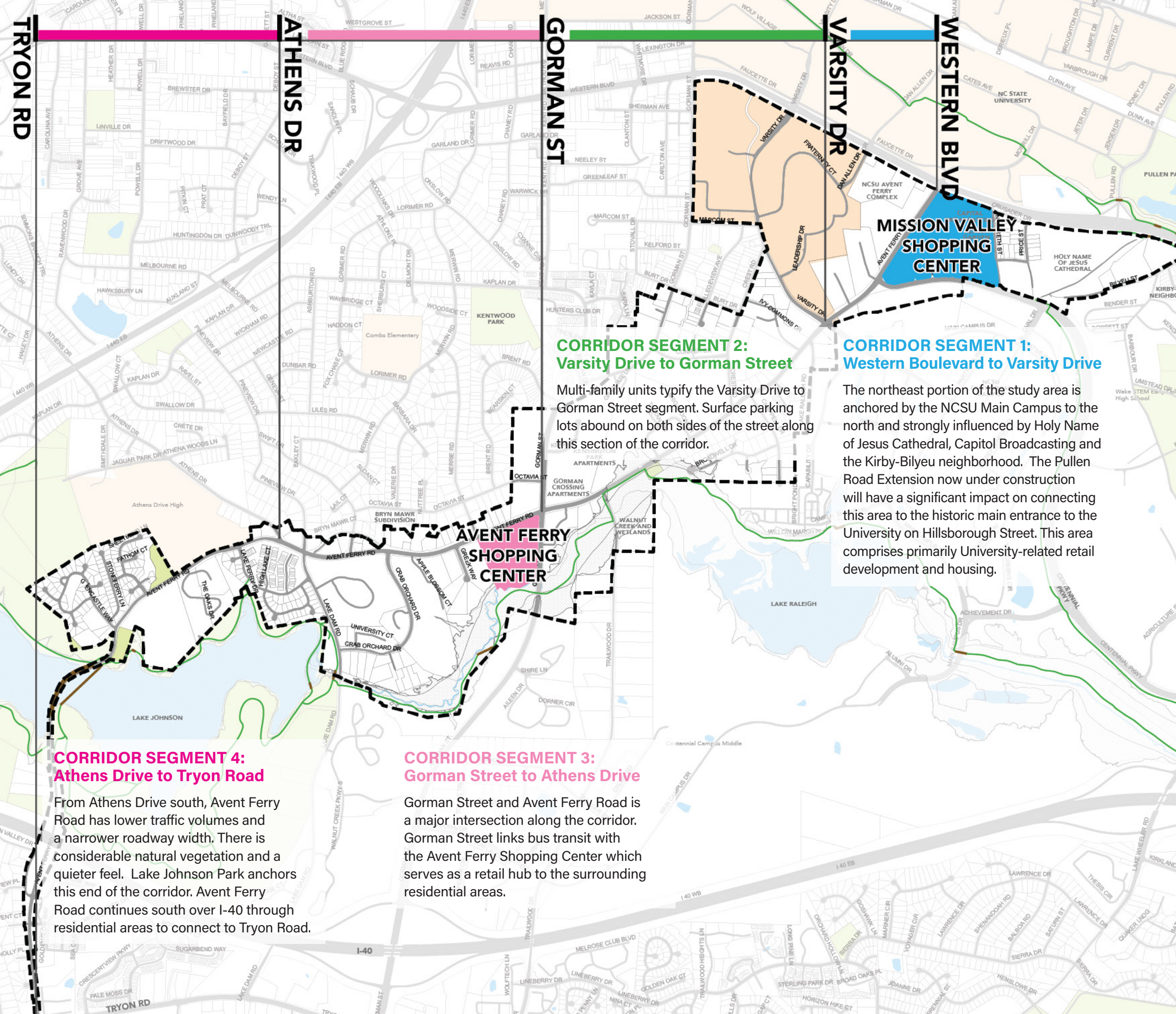
The following report outlines the public process, analysis, design concepts and recommendations that were produced through collaborative analysis and review by the design team that included the consultant group, Urban Design Center, City departments, residents, community stakeholders, and local institutions. Through the course of the study, over 800 citizens were engaged in the planning process. The resulting recommendations reflect the outcome of detailed technical analysis along with thoughtful analysis of public input, evaluating existing conditions, transportation network, bike, pedestrian and greenway connections, market analysis, connections to other infrastructure improvements in the area and, the potential to partner for private redevelopment.

District Character Assessment

The Avent Ferry Road corridor is one of the busiest in the City and serves students, neighborhoods, shopping centers, the new Cathedral, as well as daily southeast Wake County commuters. The Avent Ferry corridor study area runs from the main campus of North Carolina State University (NCSU) to NCSU Centennial Campus, to Lake Johnson. The project area boundary starts at the intersection with Western Boulevard and leads south through the intersection with Gorman Street to the intersection with Tryon Road. The physical character of Avent Ferry Road varies considerably over its three-mile length. From a concentrated urban environment at NCSU and Mission Valley Shopping Center to the sparsely developed Lake Johnson and Tryon Road areas, the corridor is a broad mix of development patterns which accommodates housing, workplaces, and transportation routes for a growing and diverse population. The City's GoRaleigh, the regional GoTriangle, and NCSU's Wolfline provide regular bus service along the corridor.

Much of the corridor is characterized by aging building stock and auto-oriented retail areas with large surface parking lots. An impressive tree canopy on both sides of the southern portion of the corridor contributes largely to the variation in character. Pedestrians and cyclists are heavy users of the corridor. Many users see the corridor as unsafe for walking or biking. Sidewalks are in deteriorating condition and discontinuous along some spans of the corridor. Bicycle infrastructure is also lacking.

Due to the distinguishable change in character, the Avent Ferry Corridor Study area is divided into four segments.



CORRIDOR SEGMENT 4: Athens Drive to Tryon Road

From Athens Drive south, Avent Ferry Road has lower traffic volumes and a narrower roadway width. There is considerable natural vegetation and a quieter feel. Lake Johnson Park anchors this end of the corridor. Avent Ferry Road continues south over I-40 through residential areas to connect to Tryon Road.

CORRIDOR SEGMENT 3: Gorman Street to Athens Drive

Gorman Street and Avent Ferry Road is a major intersection along the corridor. Gorman Street links bus transit with the Avent Ferry Shopping Center which serves as a retail hub to the surrounding residential areas.

CORRIDOR SEGMENT 2: Varsity Drive to Gorman Street

Multi-family units typify the Varsity Drive to Gorman Street segment. Surface parking lots abound on both sides of the street along this section of the corridor.

CORRIDOR SEGMENT 1: Western Boulevard to Varsity Drive

The northeast portion of the study area is anchored by the NCSU Main Campus to the north and strongly influenced by Holy Name of Jesus Cathedral, Capitol Broadcasting and the Kirby-Bilyeu neighborhood. The Pullen Road Extension now under construction will have a significant impact on connecting this area to the historic main entrance to the University on Hillsborough Street. This area comprises primarily University-related retail development and housing.

Design Concepts and Recommendations

Analysis of existing conditions and wide community input shows a heavily-used and rapidly changing corridor. While a primary goal of the Avent Ferry Road Corridor Study is “to plan for and implement a safe, vibrant corridor for pedestrians, cyclists, transit-users, and motorists that helps enhance livability and economic viability”; there is also the opportunity to leverage public infrastructure to better secure long-term corridor stability. Transitioning Avent Ferry Road into a complete streets corridor connecting greenways, parks, and recreation areas would attract and support additional private investment. Primary opportunities to improve the corridor were categorized in three key concepts: Develop a Distinct Identity, Adopt “Complete Streets” Principles, and Foster Redevelopment and Economic Viability.

1. Develop a Distinct District

The City of Raleigh received several accolades in 2016, among them; “2nd Easiest City to Find a Job”, “#2 in America’s Hottest Spot for Tech Jobs,” and “Best Cities for Recent Grads.” Much of these achievements are dedicated to the creative talent and workforce churned by the Universities of the area. The Avent Ferry Corridor is befitting with many unique assets along with its primal position as a major corridor linking the NCSU main campus and Centennial Campus, diverse commercial, office, recreational, and housing services. Its proximity to the future Dorothea Dix Park, a major BRT stop, and proximity to Downtown makes it an ideal candidate for a distinct district that could accommodate much of the future growth projected for the market area.

Many users commute along the corridor daily, while some drive to the corridor for shopping, restaurants, and recreation. The corridor should be repositioned as a distinct district with an identity by linking the adjacent educational, employment, commercial, and residential assets and tapping into the unique, diverse, and intellectual capital in the corridor community. A “livability” identity could be defined by providing safe, comfortable, and efficient access to

homes, shopping, and recreation assets via all modes of transportation.

With Avent Ferry Road as its central boulevard, the corridor area could provide an increased variety of housing options, expanded employment, and updated dining, shopping, and entertainment that could complement the existing market demand. While the draw of NCSU for education and employment is evident, the new economy’s emerging technologies and changing demographics could provide added workplace options.

Distinct District Strategies:

- Leverage infrastructure improvements to attract new private investments and new residents
- Adapt complete streets principles to safely and efficiently accommodate people in cars, on transit, on bicycles, and on foot
- Foster development within a unified district that activates area growth and inclusive vitality with respect to varying character of each corridor segment
- Develop vibrant nodes of high density mixed-use centers at Mission Valley and Avent Ferry Shopping Centers, and protect stable residential neighborhoods along the Corridor
- Provide a well-connected greenway system
- Capitalize on existing assets and provide quality housing opportunities for residents of all economic levels
- Cater diverse retail opportunities to locally and nationally operated businesses alike
- Provide a steady economic base to support commercial activities with increased residential and office densities
- Scale new construction appropriate to its context
- Implement interconnected water, vegetation, and fauna of natural systems through a continual ribbon of greenery through vegetated medians, street trees, and green infrastructure

2. Adopt “Complete Streets” Principles

Vehicular circulation has been the historic focus of the corridor. A large percentage of the population in the area perceive the corridor as unsafe for walking or biking. New best-practices are now needed to accommodate transit riders, cyclists, and pedestrians. Updated transportation services demand quality transit and walkable and bicycle-friendly neighborhoods.

The corridor should include a strong identifiable transportation network and clear well-connected pathways. Broader transportation networks would provide critical access to the area’s amenities including Dix Park, Lake Johnson, and Pullen Park. The corridor offers opportunities for a long list of potential transportation improvements including implementation of the “Complete Streets” principles to facilitate the movement of people using multiple transportation modes. “Complete Streets” is a proven strategy to expand multi-modal options and NCDOT has established policies for implementing this program.

Bus Rapid Transit (BRT) is planned for the Western Boulevard corridor. BRT will provide regular bus alternatives connecting the Avent Ferry Road corridor to Downtown Raleigh, the University, and west Raleigh. Higher density development near the resulting BRT transit stops should enhance ridership and connectivity. Gaps in cycling and pedestrian systems should be eliminated to enhance overall connectivity for users. In addition to improving connectivity gaps, safe crosswalks should be a priority. Poorly designed parking lots should be replaced and connections to the greenway system which link commercial/ recreational centers enhanced.

Complete Streets Strategies:

- Transform Avent Ferry Corridor into a Complete Street designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities
- Improve key intersections along Avent Ferry to address bike/pedestrian safety, access and crossings
- Provide safe and secure pedestrian and bicycle crossing across Western Boulevard (NCDOT underpass) to connect to both sides of the Avent Ferry corridor
- Enhance bicycle and pedestrian safety with grade-separated bicycle lanes, separated sidewalks, and isolated bicycle and vehicular lanes at busy intersections
- Improve and augment pedestrian connections between neighborhoods, University, Lake Johnson, and shopping centers
- Provide for higher density development near future BRT transit stops
- Improve bus stop amenities to encourage transit use
- Enhance connections to the greenway system

Street Section Recommendations

Application of the overarching Design Concepts themes results in a proposed approach to improve the transportation experience, safety, aesthetics, connectivity, economic sustainability and natural resources. A range of proposed design solutions are recommended throughout the corridor. The use of a unified palette of design details as well as repetition and consistency of public art should contribute to memorable corridor identity. Lane sizes should be generally reduced as bicycle infrastructure and increased vegetative area is introduced to the street sections. Transit usage should be encouraged through improved bus stop amenities as well as the increased convenience in higher density development.

There are a few noteworthy features that apply to all four segment lane configurations. The proposed dedicated bicycle lanes would be buffered from vehicular traffic, allowing a continuous path along Aventura Ferry Road between Western Boulevard and Tryon Road. Some elements of the roadway design, such as lane widths and the median width, are narrower than City of Raleigh roadway design standards; however, the proposed streetscape details are recommended for adoption as a streetscape plan. Improvements outside of private redevelopment should be budgeted as CIP items for implementation. Please see the implementation table in the final chapter for more detailed information.



Segment 1 - Option A



Segment 1 - Option B

Corridor Segment 1:
Western Boulevard to Varsity Drive

Redevelopment of the Mission Valley Shopping Center should serve as a catalyst for corridor investment. Development should capitalize on the proposed BRT and bicycle/pedestrian traffic between NCSU Centennial and Main Campuses.

The recommended design for this segment is two 10' northbound vehicle travel lanes, one northbound 11' que jump/turn lane, two 10' southbound vehicle travel lanes, an 11' center planting strip/median, 5' raised and buffered bicycle lanes on both sides of the street and 14' sidewalks on both sides of the street. Future development along Mission Valley fronting Aventura Ferry Rd. will be required to dedicate 7-9 feet (variable) of additional right-of-way to meet the 14' proposed sidewalk width.

Corridor Segment 2:
Varsity Drive to Gorman Street

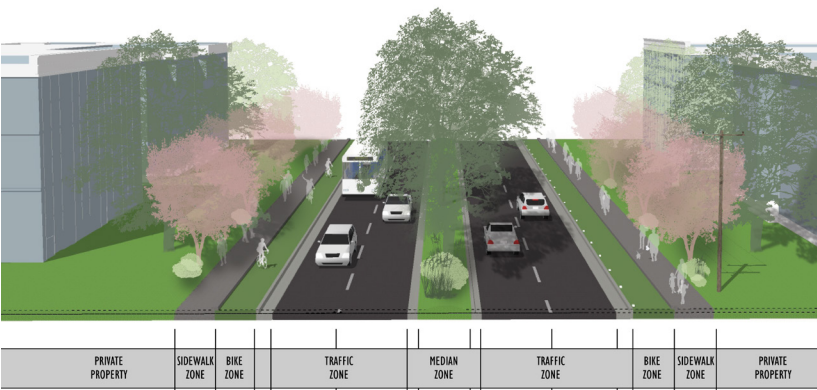
The goal for this segment is to redevelop the area with well-connected street-front buildings. Building heights should be moderate with a residential character.

The recommended design for this segment is two 10' vehicle travel lanes in each direction, an 11' center planting strip/median, 6' raised and buffered bicycle lanes on both sides of the street and 6' sidewalks on both sides of the street.

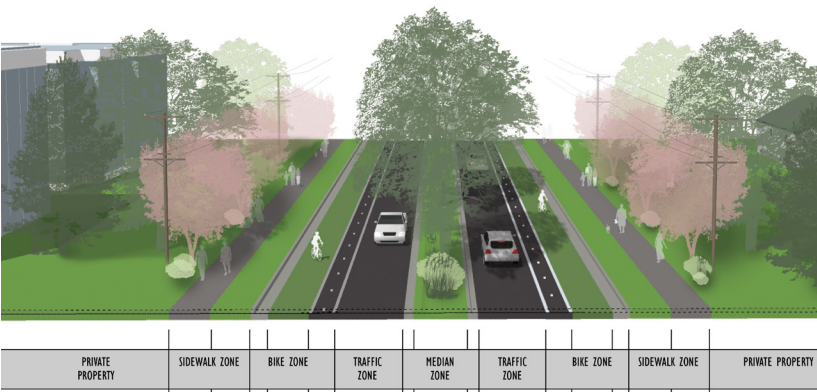
Corridor Segment 3:
Gorman Street to Athens Drive

The Gorman Street intersection should provide additional retail services to the nearby neighborhood. Enhance this pattern by updating the center into a mixed-use center that adds residential and office space.

The recommended design for this segment is one 10' vehicle travel lane in both direction, an 11' center planting strip/median, 9' raised and buffered bicycle lanes on both sides of the street and 6' sidewalks on both sides of the street.



Segment 2

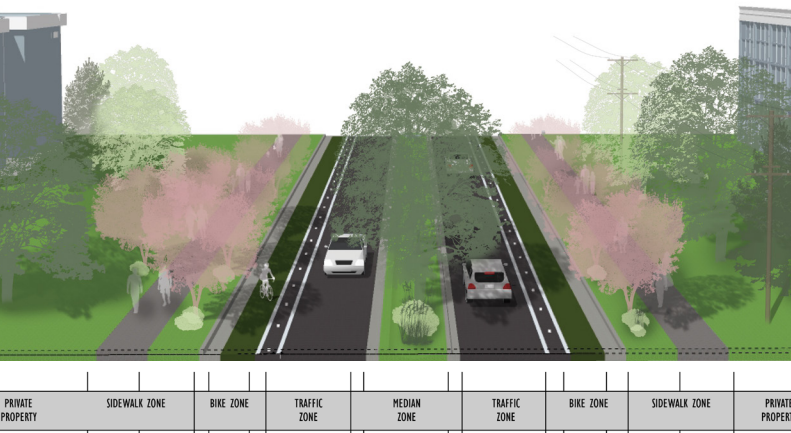


Segment 3

Corridor Segment 4:
Athens Drive to Tryon Road

Include modest redevelopment changes in this area. The primary focus of this segment should be to close gaps in the sidewalk and greenway network.

The recommended design for this segment is one 10' vehicle travel lane in each direction, an 11' center planting strip/median, 6' raised and buffered bicycle lanes and 6' sidewalks on both sides of the street.



Segment 4

The proposed Connectivity Map highlights specific locations where safety may be dramatically improved. It also outlines a theoretical street grid that should be implemented as individual properties are redeveloped. Each new redevelopment plan should attempt to provide the connections described on this map.

Redevelopment of Mission Valley Shopping Center and Avent Ferry Shopping Center will eventually create nodes of activity that bookend the corridor segment between Western Blvd and Gorman Street. Redevelopment in the rest of the corridor should occur at a lower intensity than either of the shopping centers but implement several key design principles. This will help create a network of connected streets and pedestrian and bicycle paths. Parking between buildings and Avent Ferry Road should be eliminated, dead-end streets avoided, and driveway cuts reduced. Redevelopment should interconnect projects with internal streets and access for pedestrians and cyclists. This will allow residents to move between developments without necessarily accessing Avent Ferry Road.

Proposed Comprehensive Plan Amendments for Raleigh Street and Greenway Plans:

- The dashed, dark blue streets shown in the map above are recommended additions to the Street Plan
- The dashed, dark green lines shown in the map are recommended additions to the Capital Greenway Master Plan

The proposed streets within the focus areas are recommended as Main Street, Parallel Parking street type. For more information on this street type, please see the site plan for each focus area on .pgs 48 and 50. The recommended streets outside of the focus areas would be Neighborhood Streets, refer to Unified Development Ordinance for more details on this street type.

CONNECTIVITY LEGEND

- | | | | |
|---|---|--|----------------------|
| Potential BRT Station | Existing Streets | Existing Greenway Trail | Parcels |
| Wolfline Stops | PROPOSED Street in Raleigh Street Plan | PROPOSED Trail in Capital Area Greenway Plan | Lakes & Streams |
| GoRaleigh Routes | RECOMMENDED Addition to Raleigh Street Plan | RECOMMENDED Addition to Capital Area Greenway Plan | Parks and Open Space |
| GoTriangle Stops | RECOMMENDED Separated bicycle facility | RECOMMENDED Improved bicycle/pedestrian crossing | Focus Areas |
| Recommended Stop Consolidation or Removal | | | Floodplain |



3. Foster Redevelopment and Economic Viability

There is a substantial daily commuter volume through the corridor connecting to the University and Downtown Raleigh, providing a large base of potential retail consumers. However, many pass through the corridor without stopping to patronize existing businesses. There is an opportunity to expand public infrastructure to improve the corridor's commercial viability, to attract new private investment, and support public-private partnerships crucial to broadening the economic strength of Avent Ferry Road. Public-private partnerships are critical to the long-term success of Avent Ferry Road and the plan should be prudent regarding where and how development should occur.

The corridor should provide age-in-place opportunities for older residents and enable many demographic groups to stay in the community. The corridor and surrounding areas would benefit from a plan to replace aging and outdated apartments with new residential options. National mixed-use urban development trends suggest opportunities to diversify land uses and services to attract and retain diverse groups of owners and renters. Several underutilized parcels and aging buildings provide opportunities for mixed-use redevelopment along the corridor that could accommodate the needs of all demographics.

Redevelopment and Economic Viability Strategies:

The market analysis suggests the following strategies to drive corridor's economic development:

- Improve the safety and aesthetic appeal of the corridor
- Formulate strategies to attract and retain residents
- Make commercial services a high priority to support additional residential densities
- Promote ease-of-access and movement and attractive place-making
- Leverage public infrastructure improvements
- Highlight and celebrate the area's diversity through partnerships

Establishing a widely recognizable corridor within the city is a key opportunity for the Avent Ferry visioning process. This is often referred to as placemaking, or the process and philosophy of capitalizing on a local community's assets, inspirations, and potential with the intention of creating public spaces that promote people's health, happiness, and wellbeing. In part, placemaking is accomplished by implementing improvements to address the issues and accentuate the assets described below.

The development analysis suggests the following strategies to reinforce Avent Ferry Road's development identity:

- Establish consistent landscaping and signage standards
- Define standards for building size, location, and quality
- Integrate repetitive, unique art into the design

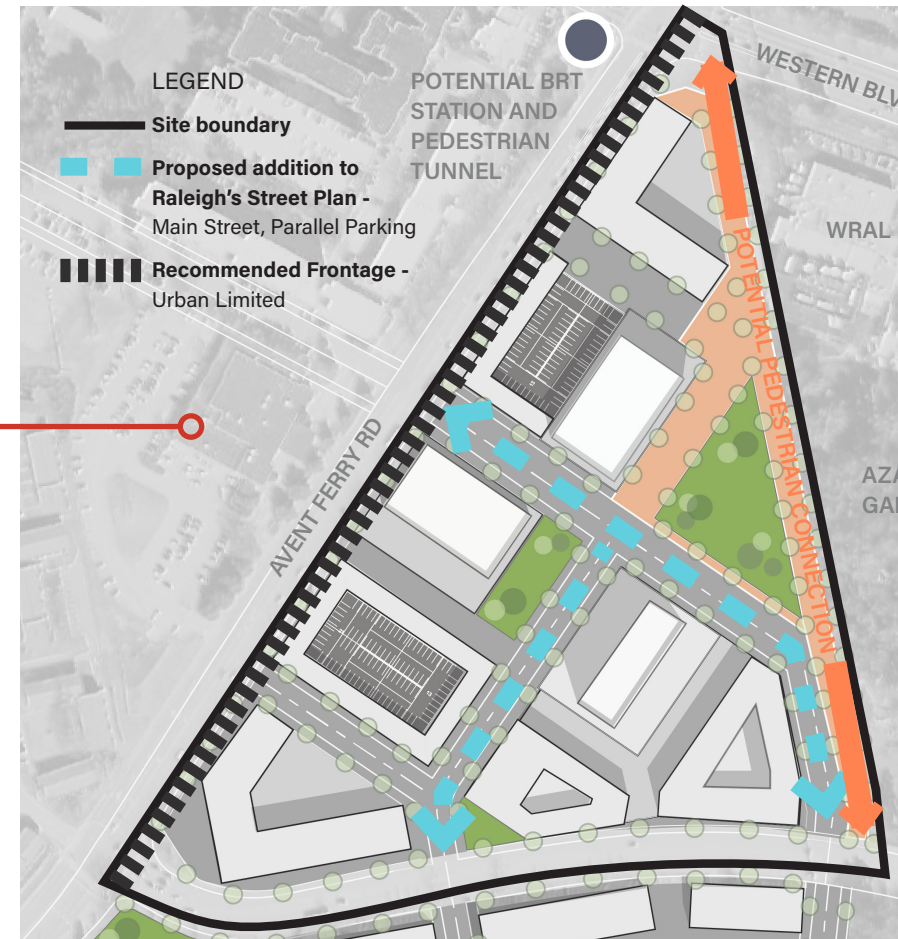


Strategies for MVSC:

- Enhanced street network
- Devise a master plan that includes a mix of uses at the Mission Valley Shopping Center.
- Upgrade and renovate the Mission Valley Shopping Center to attract a wider variety of food and beverage options; for example, breweries, international markets, restaurants, and local health food stores.
- Integrate flexible work space, housing, and lodging.
- Invest in multimodal transportation infrastructure that provide access to the Mission Valley area from NCSU, Centennial Campus, Dix Park, and points south along the corridor.
- Development scenarios including TOD overlay

Proposed Comprehensive Plan Amendments for Mission Valley Shopping Center:

- Amend the Street Plan to create a urban street grid.
- Create a policy framework for height guidance that supports five to seven stories at the edges of the shopping center with allowances for additional height considered in exchange for significant public amenities
- Urban Form for the shopping center should conform with the Urban Limited Frontage designation along Avent Ferry Road
- New internal street networks should support buildings closer to the street edge
- Due to its proximity to a future BRT stop, the site is recommended for consideration as a future Transit Overlay District with potential for denser mixed-use development



Targeted Focus Areas

Targeting specific focus area development nodes compliments the corridor's development strategy. Focused enhancements in public infrastructure and private development would help create destination hubs at strategic locations along the corridor. The three target areas identified in the study with the best opportunities for redevelopment are Mission Valley, Avent Ferry Shopping Center, and Lake Johnson.

Mission Valley Shopping Center

Mission Valley has the potential for a denser updated urban mixed-use development. Redevelopment could include replacing existing buildings and infilling parking lots with ground level active uses and multiple stories of residential and office uses.

Strategies for AFSC:

- Devise a strategic master plan to include the Avent Ferry Shopping Center and NSCU (former and existing Greek housing) sites.
- Upgrade and renovate the Avent Ferry Shopping Center to integrate more traditional work spaces and housing options for a walkable mixed-use environment.
- Provide connectivity from redeveloped areas to existing greenways and pathways for an enhanced bicycle and pedestrian network.
- Street connectivity

Proposed Comprehensive Plan Amendments for Avent Ferry Shopping Center:

- Amend the Street Plan to create a urban street grid. (See map below)
- Create a policy framework for height guidance of three to five stories, with height along Avent Ferry Road not exceeding three stories. Additional height should be focused away from existing detached residential properties
- Urban Form for the shopping center should conform with the Green Frontage designation
- Provide connection from the site to the Walnut Creek Greenway



Avent Ferry Shopping Center

Repositioning and reorienting structures at this pivotal intersection would create opportunities for additional retail uses, new housing options and improved circulation and access.

Lake Johnson

Lake Johnson Park is divided by Avent Ferry Road. It is a popular recreational destination and a significant ecological resource.

Implementation

A detailed table of steps for implementation of the design concepts and strategies are described in detail in the final chapter of this report.

Future Land Use

The current Raleigh Future Land Use Map is consistent with the findings of this analysis and community goals with the exception of the area around Chappel Drive and Brigadoon Drive. This area is currently classified as Low Density Residential. To meet the goals of increased housing density and because of its proximity to Centennial Campus, this area should be reclassified to Medium Density Residential. The remainder of the corridor is appropriately classified and provides for preservation of existing single-family neighborhoods, increased residential density, and higher intensity mixed-use developments at the Mission Valley and Avent Ferry Shopping Centers.

Proposed Comprehensive Plan Amendments for the Future Land Use Map:

- Change specified parcels from Low-Density Residential to Medium-Density Residential

The only recommended change to the FLUM map is outlined above. The parcels are recommended to change from Low-Density Residential to Medium-Density Residential.

FUTURE LAND USE

- | | |
|--------------------------------|------------------------------|
| Neighborhood Mixed Use | Rural Residential |
| Office & Residential Mixed Use | Low Density Residential |
| Community Mixed Use | Medium Density Residential |
| Regional Mixed Use | Moderate Density Residential |
| Central Business District | High Density Residential |
| Office/Research & Development | Public Facilities |
| Business & Commercial Services | Public Parks & Open Space |
| Institutional | Private Open Space |
| General Industrial | Special Study Area |

- Avent Ferry Study Area
- Avent Ferry Corridor
- Street
- Parcel



0 0.25 0.5 1 Miles

Scale: 1" = 1/8 Mile

CITY PLANNING



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City of Raleigh
City Planning Department
1 Exchange Plaza, Suite 300
919-996-2682
raleighnc.gov/planning